

WHAT IS CLAIMED IS

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1. A capacitor, comprising:  
a capacitor part comprising a dielectric  
film sandwiched by a pair of electrodes; and  
a support body of a film of an organic  
10 polysilane, said support body supporting said  
capacitor part thereon.

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2. The capacitor as claimed in claim 1,  
further comprising an insulation layer covering said  
capacitor part.

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3. A method of manufacturing a capacitor  
including a capacitor part in which a dielectric film  
25 is sandwiched by a pair of electrodes and a support  
body of an organic polysilane film supporting said  
capacitor part, comprising the steps of:

forming a layer of organic polysilane on a  
surface of a base material;

30 forming a first electrode on said layer of  
organic polysilane;

forming a dielectric film on said first  
electrode;

forming a second electrode on said dielectric film;

forming an insulation layer on said layer of organic polysilane and on said second electrode;

5           said layer of organic polysilane, said first electrode, said dielectric film, said second electrode and said insulation layer forming a layered body on said base material,

10           forming a groove in said layer of organic silane and said insulation layer for dividing said layered body into individual capacitors; and

removing said base material.

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4. The method as claimed in claim 3, wherein said step of removing said base material is conducted in the state that a tape is attached to a top surface  
20 of said insulation layer so as to bridge said groove.

25           5. substrate for mounting a semiconductor chip thereon, comprising:

a substrate body defined by upper and bottom surfaces;

30           a plurality of terminals provided on said top surface for connection with a semiconductor chip mounted on said top surface, said top surface thereby forming a chip-mounting surface;

a plurality of terminals provided on said

bottom surface for external connection, said bottom surface thereby forming a mounting surface; and

a capacitor embedded in said substrate body right underneath said chip-mounting surface,

5               said capacitor comprising:

a capacitor part including a dielectric film sandwiched by a pair of electrodes; and

a support body of an organic polysilane film supporting said capacitor part.

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6. A method of manufacturing a substrate for  
15 mounting a semiconductor chip, said substrate having a mounting surface carrying thereon terminals for external connection at a lower principal surface and a chip-mounting surface for carrying a semiconductor chip at an upper principal surface, said substrate  
20 further including a capacitor embedded right underneath said chip-mounting surface such that said capacitor includes a capacitor part formed of a dielectric film sandwiched by a pair of electrodes and a support body of an organic polysilane film  
25 supporting said capacitor part, said capacitor having an insulation film covering said capacitor part,  
said method comprising the steps of:  
bonding said capacitor on a base;  
forming an insulation layer on said base  
30 such that said insulation layer covers said capacitor;  
laminating a plurality of insulation layers on said base so as to cover said capacitor; and  
removing said base.

7. A semiconductor device, comprising:  
a substrate; and  
a semiconductor chip mounted on said  
substrate,  
5           said substrate comprising:  
a substrate body defined by upper and bottom  
surfaces;  
a plurality of terminals provided on said  
top surface for connection with said semiconductor  
10 chip mounted on said top surface, said top surface  
thereby forming a chip-mounting surface;  
a plurality of terminals provided on said  
bottom surface for external connection, said bottom  
surface thereby forming a mounting surface; and  
15           a capacitor embedded in said substrate body  
right underneath said chip-mounting surface,  
said capacitor comprising:  
a capacitor part including a dielectric film  
sandwiched by a pair of electrodes; and  
20           a support body of an organic polysilane film  
supporting said capacitor part.